BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,199	04/26/2001	James E. Veres	MSFT-0245/154792.2	8823

7590 06/02/2004

John E. McGlynn, Esquire
WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103

EXAMINER	
FOWLKES, ANDRE R	

ART UNIT	PAPER NUMBER
2122	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/843,199	VERES ET AL.	
	Examiner	Art Unit	
	Andre R. Fowlkes	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/18/2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/18/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-52 are pending.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16-34 of U.S. Patent No. 6,609,186 in view of Kullick et al. (Kullick), U.S. Patent No. 5,732,275.

As per claims 1 and 2:

Claim 23 of U.S. Patent No. 6,609,186 recites a method of managing memory (for managing application installation operations) by removing portions of programs from memory in response to issuing/receiving command calls and using several application installation operations. The method of claim 23 differs from claim 2 of the instant

application in that it doesn't explicitly disclose using an initialize call before performing the application installation operation and a finalize call after the application installation operation is successfully completed (e.g. a notify-then-commit architecture).

However, Kullick, in an analogous environment, discloses **receiving from the application a call to initialize the application install operation; and receiving from the application a call to finalize the application install operation**, (col. 2:39-47, "The control module performs the functions of locating and identifying other versions of the program of interest, determining whether the other versions are newer than currently stored versions, and (then provides notification (i.e. a call to initialize), downloads, and installs the application)", and "the control module can copy the newer version to a specified location, (make a finalize call, and then) remove older versions that have been replaced by the newer version").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Kullick into the system of U.S. Patent No. 6,609,186 to provide for **receiving from the application a call to initialize the application install operation and receiving from the application a call to finalize the application install operation**. The modification would have been obvious because one of ordinary skill in the art would want to have the system provide notification in order to automatically keep the latest software installed on their computer while removing the old software to conserve memory space (Kullick, col. 2: 4-11).

The method of U.S. Patent No. 6,609,186, claims 22-34, differ from claims 3, 17, 33, 41, and 50, of the instant application, in that these claims are directed to issuing/receiving calls to abort a procedure in the event of a failed install, downsize, reinstall, or uninstall operation.

However, Kullick, in an analogous environment, discloses that **if the application install operation is not executed successfully by the application, receiving a call to abort the application install operation** (col. 2: 9-15, "Typically when a software program is updated, there is no need to keep the previous, older version ... In some cases, however, it may be desirable to have access to multiple versions of the program... (If the newly installed application is installed in error, the user may desire to abort the install operation, and) use the older version (of the software)").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Kullick into the system of U.S. Patent No. 6,609,186 to **receive a call to abort the application install operation, if the application install is not executed successfully by the application.** The modification would have been obvious because one of ordinary skill in the art would want to install the application properly and effectively, or not at all (Kullick, col. 2: 4-8).

Claims 4-9, 12-16, 19-25, 28-32, 36-40 and 44-49 of the instant application attempt to further limit claim 1 by using non-functional descriptive material to describe names for each individual initialize, finalize, get and set call, and parameter. These

claims are still unpatentable over U.S. Patent No. 6,609,186 in view of Kullick et al. (Kullick), U.S. Patent No. 5,732,275 since the combination does perform the functions described and since non-functional descriptive material cannot render non-obvious an invention that would have otherwise been obvious (see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983)).

As per claims 10, 18, 26, 34, 42, and 51, these claims are directed to a computer readable medium having instructions for performing the steps of the instant application wherein such a medium is also claimed in U.S. Patent No. 6,609,186, at claim 32. Accordingly, such claimed limitations also would have been obvious over Patent 6,609,186 in view of Kullick, as noted above.

As per claims 11, 27, 35, 43, and 52, these are method versions of the claimed method discussed above, in claim 2, wherein all claimed limitations also have been addressed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al. (Engstrom), U.S. Patent No. 6,134,602, in view of Kullick et al. (Kullick), U.S. Patent No. 5,732,275.

As per claim 1, this is a method version of the claimed method discussed below, in claim 11, wherein all claimed limitations also have been addressed.

As per claim 2, the rejection of claim 1 is incorporated and further Engstrom discloses that **said application installation operation is at least one of the following: install, downsize, reinstall, uninstall** (col. 8:39-59, "the API includes four function calls pertaining to grouping code and data: 1) CreateGroup 2)AddMemoryToGroup 3) DestroyGroup 4) DeleteMemoryFromGroup", wherein CreateGroup installs a group of code (i.e. an application), AddMemoryToGroup reinstalls parts of an application, DestroyGroup uninstalls the application, and DeleteMemoryFromGroup downsizes the application).

As per claim 3 , Engstrom also discloses such claimed limitations as addressed in claim 17, below.

As per claims 4-7, these claims recite using a notify-then-commit architecture (**i.e. the initialize and finalize calls**) to perform each of the **install, downsize, reinstall, and uninstall operations**. These claims additionally recite non-functional

descriptive material, such as specific command names for performing initialization and finalization calls.

Engstrom discloses performing **install, downsize, reinstall, and uninstall operations**, (col. 8:39-59, "the API includes four function calls pertaining to grouping code and data: 1) CreateGroup 2)AddMemoryToGroup 3) DestroyGroup 4) DeleteMemoryFrom Group", wherein CreateGroup installs a group of code (i.e. an application), AddMemoryToGroup reinstalls parts of an application, DestroyGroup uninstalls the application, and DeleteMemoryFromGroup downsizes the application).

Engstrom doesn't explicitly disclose using a notify-then-commit architecture (**i.e. the initialize and finalize calls**) to perform these operations.

However, Kullick, in an analogous environment, discloses using a notify-then-commit architecture (i.e. **the initialize and finalize calls**), (col. 2:39-47, "The control module performs the functions of locating and identifying other versions of the program of interest, determining whether the other versions are newer than currently stored versions, and (then provides notification, downloads, and installs the application)", and "the control module can copy the newer version to a specified location (make a finalize call) and remove older versions that have been replaced by the newer version").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Kullick into the system of Engstrom to use a notify-then-commit architecture (**i.e. the initialize and finalize calls**) to perform each of the install, downsize, reinstall, and uninstall operations. The modification would have been obvious because one of ordinary skill in the art would

want to have the system provide notification in order to automatically keep the latest software installed on their computer while removing the old software to conserve memory space (Kullick, col. 2: 4-11).

As per claims 8 and 9, these claims recite **sending/receiving calls to get and set properties and information** used for performing install, downsize, reinstall, and uninstall operations. These claims additionally recite non-functional descriptive material, such as specific command names for performing get and set property calls.

Engstrom discloses **sending/receiving calls to get and set properties and information** used for performing install, downsize, reinstall, and uninstall operations (col. 8: 30-59, "Applications designate specific pieces of code ... (to be installed), by specifying the address and size of the code to be added (i.e. sending/receiving get and set calls to send/retrieve/set the properties of applications to be installed). For, code the application can specify the name of the function or functions of the application, which implicitly provides the address of the executable code ... (Additionally) the application can specify a pointer ... as well as the size of the structure").

As per claim 10, the rejection of claim 1 is incorporated and further Engstrom discloses **a computer readable medium having instructions thereon for performing the method of claim 1** (fig. 3, and the associated text, (e.g. col. 7:8 – col. 8:65), describe a computer readable medium having instructions thereon for performing the method described in claim 1).

As per claim 11, Engstrom discloses a virtual memory management system comprising an application programming interface enabling application programs to group code and data to control allocation of physical memory, comprising:

- receiving from the application a call to set a property related to performing an application install operation (Fig. 3 and col. 8: 30-59, "Applications designate specific pieces of code ... (to be installed), by specifying (i.e. setting) the address and size of the code to be added.

Engstrom doesn't explicitly disclose **receiving from the application a call to initialize the application install operation; and receiving from the application a call to finalize the application install operation**.

However, Kullick, in an analogous environment, discloses **receiving from the application a call to initialize the application install operation; and receiving from the application a call to finalize the application install operation**, (col. 2:39-47, "The control module performs the functions of locating and identifying other versions of the program of interest, determining whether the other versions are newer than currently stored versions, and (then provides notification (a call to initialize), downloads, and installs the application)", and "the control module can copy the newer version to a specified location (make a finalize call) and remove older versions that have been replaced by the newer version").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Kullick into the system

of Engstrom to provide for **receiving from the application a call to initialize the application install operation and receiving from the application a call to finalize the application install operation**. The modification would have been obvious because one of ordinary skill in the art would want to have the system provide notification in order to automatically keep the latest software installed on their computer while removing the old software to conserve memory space (Kullick, col. 2: 4-11).

As per claims 12-14, these claims recite **sending/receiving calls, including parameters, to get and set properties and information** used for performing install, downsize, reinstall, and uninstall operations. These claims additionally recite non-functional descriptive material, such as specific parameter names.

Engstrom also discloses **sending/receiving calls to get and set properties and information** used for performing install, downsize, reinstall, and uninstall operations (col. 8: 30-59, "Applications designate specific pieces of code ... (to be installed), by specifying the address and size of the code to be added (i.e. sending/receiving get and set calls to send/retrieve/set the properties of applications to be installed). For, code the application can specify the name of the function (i.e. a parameter) or functions of the application, which implicitly provides the address (i.e. a parameter) of the executable code ... (Additionally) the application can specify a pointer (i.e. a parameter pointing to a string)... as well as the size of the structure (i.e. a parameter)").

As per claims 15 and 16, Engstrom also discloses such claimed limitations as addressed in claim 11, above.

As per claim 17, the rejection of claim 12 is incorporated and further, Engstrom doesn't explicitly disclose **if the application install is not executed successfully by the application, receiving a call to abort the application install operation**.

However, Kullick, in an analogous environment, discloses **if the application install is not executed successfully by the application, receiving a call to abort the application install operation** (col. 2: 9-15, "Typically when a software program is updated, there is no need to keep the previous, older version ... In some cases, however, it may be desirable to have access to multiple versions of the program... (If the newly installed application is installed in error, the user may desire to abort the install operation, and) use the older version (of the software)").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Kullick into the system of Engstrom to **receive a call to abort the application install operation, if the application install is not executed successfully by the application.** The modification would have been obvious because one of ordinary skill in the art would want to install the application properly and effectively, or not at all (Kullick, col. 2: 4-8).

As per claim 18, Engstrom also discloses such claimed limitations as addressed in claim 10, above.

As per claims 19-25, these claims recite **sending/receiving calls to get and set properties and information** used for performing install, downsize, reinstall, and uninstall operations. These claims additionally recite non-functional descriptive material, such as specific names of parameters set and retrieved to perform application installation operations (ex. Parameters specifying the estimated install size, the path, and execution command lines specific to each application to be installed).

Engstrom discloses **sending/receiving calls to get and set properties and information** used for performing install, downsize, reinstall, and uninstall operations (col. 8: 30-59, "Applications designate specific pieces of code ... (to be installed), by specifying the address and size of the code (i.e. estimated install size) to be added (i.e. sending/receiving get and set calls to send/retrieve/set the properties of applications to be installed). For, code the application can specify the name of the function (i.e. name of the function, including pathnames) or functions of the application, which implicitly provides the address of the executable code (i.e. the execution command lines) ... (Additionally) the application can specify a pointer ... as well as the size of the structure").

As per claim 26, Engstrom also discloses such claimed limitations as addressed in claim 10, above.

As per claim 27, this is another method version of the claimed method discussed above, in claim 11, wherein all claimed limitations also have been addressed.

As per claims 28-34, Engstrom also discloses such claimed limitations as addressed in claims 14, 24, 7, 17, and 10, respectively above.

As per claim 35, this is another method version of the claimed method discussed above, in claim 11, wherein all claimed limitations also have been addressed.

As per claims 36-42, Engstrom also discloses such claimed limitations as addressed in claims 14, 24 and 7, respectively above.

As per claim 43, this is another method version of the claimed method discussed above, in claim 11, wherein all claimed limitations also have been addressed.

As per claims 44-51, Engstrom also discloses such claimed limitations as addressed in claims 14, 24, 19, 6, 17 and 18, respectively above.

As per claim 52, this is another method version of the claimed method discussed above, in claim 10, wherein all claimed limitations also have been addressed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (703)305-8889. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703)305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARF

TUAN DAM
SUPERVISORY PATENT EXAMINER